

Amendments to and Listing of the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. Canceled
2. (Currently amended) An image processing method of making luminance correction on the basis of a luminance histogram showing distribution of a luminance level of image data in which an image is expressed by a numerical value, comprising the steps of:
 - obtaining a luminance average value in said luminance histogram, a luminance standard deviation indicative of a degree of dispersion of luminance distribution from said luminance average value, and a peak distance value which indicates a longest distance between peaks is calculated in said luminance histogram in the case where plural peaks exist, so that plural distances between respective peaks exist;
 - comparing a distribution discrimination value which can discriminate whether a distribution deviation of the luminance level exists on a low luminance side or a high luminance side in said luminance histogram or not with the obtained peak distance value, and comparing a halftone presence/absence discrimination value which can discriminate whether the distribution deviation of the luminance levels does not exist in a halftone in said luminance histogram or not with the obtained standard deviation, thereby discriminating whether said image is a backlight image or not on the basis of results of said comparisons; and
 - comparing each of said luminance average value and said luminance standard deviation by using an exposing state discrimination value which can discriminate the exposing state, thereby discriminating an exposing state of an image other than the backlight image.
3. (Original) The image processing method according to claim 2, wherein in said image process, luminance correction according to a backlight process to the backlight image, an under-exposure process to an under-exposure image, an over-exposure process to an

over-exposure image, and a standard exposure process to a standard exposure image is made in accordance with the exposing state of said image.

4. (Original) The image processing method according to claim 2, wherein in said under-exposure process, in a histogram of said under-exposure image, said histogram is stretched in accordance with the histogram of said under-exposure image so as to shift the luminance average value existing on the low luminance side toward a predetermined value of said histogram.

5. (Original) The image processing method according to claim 3, wherein in said over-exposure process, in a histogram of said over-exposure image, said histogram is stretched in accordance with the histogram of said over-exposure image so as to shift the luminance average value existing on the high luminance side toward a predetermined value of said histogram.

6. (Original) The image processing method according to claim 3, wherein in said standard exposure process, in a histogram of said standard exposure image, the luminance average value is shifted toward a predetermined value in accordance with said histogram.

7. (Original) The image processing method according to claim 3, wherein in said backlight process, a histogram of said backlight image is divided into halves, the histogram on said low luminance side is stretched in accordance with the histogram of said backlight image so as to shift the luminance average value existing on the low luminance side toward a predetermined value, and the histogram on said high luminance side is stretched in accordance with the histogram of said backlight image so as to shift the luminance average value existing on the high luminance side toward said predetermined value.

8. (Original) The image processing method according to claim 6, wherein in said backlight process, contacts where the histogram on said low luminance side and the

histogram on said high luminance side have been respectively stretched are smoothly shown by using a three-dimensional function.

9. (Previously presented) The image processing method according to 4, wherein said predetermined value is an intermediate value in the histogram.

10. (Original) The image processing method according to claim 2, wherein prior to discriminating said exposing state, whether said image data is artificially formed image data or not is discriminated, and if it is determined that said image data is the artificially formed image data, the luminance correction is not made to said image data.

11. (Original) The image processing method according to claim 2, wherein if it is determined that said image data is a part of a series of image data constructed by a plurality of data, said image process is executed to the image data obtained by collecting a series of image data.

12. Canceled

13. (Previously presented) The image processing apparatus according to claim 19, further comprising an artificial image discriminating unit which discriminates whether said image data is artificially formed image data or not prior to the discrimination of said exposure discriminating unit,

and wherein when it is determined by said artificial image discriminating unit that said image data is the artificially formed image data, said correction processing unit does not make the luminance correction to said image data.

14. (Previously presented) The image processing apparatus according to claim 19, further comprising a same image discriminating unit which discriminates whether said image data is a series of image data constructed by a plurality of data or not,

and wherein if said same image discriminating unit determines that said image data is same banded image data, said image process is executed to the image data obtained by collecting a series of image data.

15. (Previously presented) The image processing method according to claim 5, wherein said predetermined value is an intermediate value in the histogram.

16. (Previously presented) The image processing method according to claim 6, wherein said predetermined value is an intermediate value in the histogram.

17. (Previously presented) The image processing method according to claim 7, wherein said predetermined value is an intermediate value in the histogram.

18. (Previously presented) An image processing method for discriminating an exposure state of image data on the basis of a luminance histogram which indicates a distribution of luminance level of the image data and is generated from the image data, comprising the steps of:

calculating a luminance deviation value indicating a distribution state of luminance level from the luminance histogram;

detecting one or more peaks from the luminance histogram;

calculating a peak distance value which indicates the longest distance between peaks in the case that plural peaks exist so that plural distances between respective peaks exist; and

discriminating that the image is a backlight image when the luminance deviation value is greater than or equal to a first predetermined value and the peak distance value is greater than or equal to a second predetermined value.

19. (Previously presented) An image processing apparatus for discriminating an exposure state of image data on the basis of a luminance histogram which indicates a

distribution of luminance level of the image data and is generated from the image data, said apparatus comprising:

a luminance standard deviation unit which calculates a luminance deviation value indicating a distribution state of luminance level from the luminance histogram;

a peak distance obtaining unit which detects one or more peaks from the luminance histogram; and

an exposure discriminating unit which calculates a peak distance value which indicates the longest distance between peaks in the case that plural peaks exist so that plural distances between respective peaks exist; and discriminates that the image is a backlight image when the luminance deviation value is greater than or equal to a first predetermined value and the peak distance value is greater than or equal to a second predetermined value.